

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A manufacturing method of a thin component, including the steps of

heating a thin component (1), and thereafter, while sizing with molds (12a, 12b) and using said molds (12a, 12b) as cooling media of said thin component (1), performing one of quenching and isothermal transformation processes on said thin component (1).

2. (Currently Amended) The manufacturing method of a thin component according to claim 1, wherein

said step of sizing said thin component (1) with said molds (12a, 12b) includes the step of pressing said thin component (1) with said molds (12a, 12b).

3. (Currently Amended) The manufacturing method of a thin component according to claim 1, wherein

said quenching of said thin component (1) is performed using said molds (12a, 12b) as quenching media.

4. (Currently Amended) The manufacturing method of a thin component according to claim 1, wherein

said molds (12a, 12b) have cooling means, and said thin component (1) can continuously be quenched by said molds (12a, 12b).

5. (Currently Amended) The manufacturing method of a thin component according to claim 1, wherein

said thin component (1) is quenched in an atmosphere in which oxidation of said thin component (1) is prevented.

6. (Currently Amended) The manufacturing method of a thin component according to claim 1, wherein

after said thin component (1) is quenched, said thin component (1) is tempered using said molds (12a, 12b) as temperature controlling media.

7. (Currently Amended) The manufacturing method of a thin component according to claim 6, wherein

said molds (12a, 12b) are used in both of said steps of quenching and tempering said thin component (1).

8. (Currently Amended) The manufacturing method of a thin component according to claim 1, wherein

in said step of quenching said thin component (1), a molding process of said thin component (1) using said molds (12a, 12b) is concurrently performed.

9. (Currently Amended) The manufacturing method of a thin component according to claim 1, wherein

said heating of said thin component (1) is performed by induction heating.

10. (Currently Amended) The manufacturing method of a thin component according to claim 1, wherein

a material of said thin component (1) is steel containing carbon by at least 0.4 mass %.

11. (Original) A bearing ring, wherein said bearing ring is manufactured by the method according to claim 1.

12. (Currently Amended) A thrust needle roller bearing, wherein said bearing ring (1) according to claim 11 is used.

13. (Currently Amended) A manufacturing method of a rolling bearing ring, comprising the step of,

after heating a rolling bearing ring as said thin component (1) using the manufacturing method of a thin component (1) according to claim 1, by cooling said rolling bearing ring while pressing with said molds (~~12a, 12b~~) and using said molds (~~12a, 12b~~) as quenching media, quenching said rolling bearing ring.

14. (Currently Amended) The manufacturing method of a rolling bearing ring according to claim 13, wherein

said heating of said rolling bearing ring (1) is performed by induction heating.

15. (Currently Amended) The manufacturing method of a rolling bearing ring according to claim 13, wherein

said rolling bearing ring (1) is mid-carbon steel containing carbon by at least 0.4 mass %.

16. (Currently Amended) The manufacturing method of a rolling bearing ring according to claim 13, wherein

in said quenching, a pressing pressure by said molds (~~12a, 12b~~) is at least 2.94 N/cm^2 .

17. (Original) A rolling bearing ring, wherein said rolling bearing ring is manufactured by the method according to claim 13.

18. (Currently Amended) A rolling bearing, comprising said rolling bearing ring (1) according to claim 17 and a rolling element (2).

19. (Original) The rolling bearing according to claim 18, wherein said rolling bearing is a thrust needle roller bearing.